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MOTOROLA, INC.
LAW DEPARTMENT
1303 E. ALGONQUIN ROAD
SCHAUMBURG, IL 60196

EXAMINER	
AMINZAY, SHAIMA Q	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/672,039	TAYLOE ET AL.	
	Examiner	Art Unit	
	Shaima Q. Aminzay	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,16-25 and 26-37* is/are rejected.

7)☒ Claim(s) *8-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-7, and 26, 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butovitsch (Butovitsch et al., US Patent No. 6,259,927) in view of Higuchi (Higuchi et al., US Patent No. 6,967,987), and further in view of Shinde (Shinde, US Publication No. 2004/0174,926).

Regarding claim 1, Butovitsch discloses in a mobile communication system *(see for example, Figures 1-5c, column 1, lines 1-13)*, a power reduction method for coupling a base station to a mobile unit *(see for example, Figures 1-5c, Abstract, lines 1-11, column 1, lines 1-13, column 4, lines 56-58, column 5, lines 51-57, column 6, lines 30-37, column 7, lines 57-63, column 6, lines 52-55, column 8, lines 5-20, lines 55-67 continued to column 9, lines 1-3, mobile communication system with transmission power control for connection of mobile and base station and reducing the transmission power)*, the power reduction

method comprising the steps of: detecting *[consecutive]* frame erasures (FERs)on a link coupling the base station to the mobile unit *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission)*; determining whether the base station is in a soft handoff condition with the mobile unit *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, determining the station is in soft-handoff condition with mobile station);* and when N *[consecutive]* frame erasures (FERs) have been detected *(see for example, column 7, lines 57-63, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, the frame erasures detected)*, *[clamping]* a power of transmission on the link to a particular level *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-3, adjusting the power transmission of the connection link to a particular level).*

Butovitsch does not specifically teach the N consecutive frame erasures, and clamping, however, Butovitsch teaches the frame erasures and adjusting to minimum or lowest value *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-3, adjusting the power transmission of the connection link to a particular level).*

In a related art dealing with power transmission control of a CDMA system *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67)*, Higuchi teaches N consecutive frame erasures *(see for example, Figure 5,*

column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Higuchi's frame erasures calculation into Butovitsch mobile communication system to provide a system with transmission power control with reduced power and reduced interference *(Butovitsch, column 1, lines 5-13, column 5, lines 51-57)*, and with constant communication reception quality regardless of changes in the environment *(Higuchi, column 2, lines 52-58)*.

However, Higuchi does not specifically teach clamping.

In related art dealing with power transmission control in a CDMA system *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6)*, Shinde teaches power level clamping *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6)*.

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Shinde's power level clamping into Butovitsch in view of Higuchi' mobile communication system with transmission power to provide a CDMA communication system "capable of reliably preventing an erroneous operation" and "guaranteeing reliability of the system" *(Shinde, paragraph [0016], lines 1-8)*.

Regarding claim 26, Butovitsch discloses a power reduction method for a mobile communication system for controlling power transmitted by a base station to a mobile unit *(see for example, Figures 1-5c, Abstract, lines 1-11, column 1, lines 1-13, column 4, lines 56-58, column 5, lines 51-57, column 6, lines 30-37, column 7, lines 57-63, column 6, lines 52-55, column 8, lines 5-20, lines 55-67 continued to column 9, lines 1-3, mobile communication system with transmission power control for connection of mobile and base station and reducing the transmission power)*, the power reduction method comprising the steps of: *[clamping by]* the base station a power of transmission of a link between the mobile unit and the base station when *[N consecutive]* frame erasures have been detected *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, the frame erasures detected and adjusting the power level of the connection link)*; and *[unclamping by]* the base station the power of transmission of the link between the mobile unit and the base station when M *[consecutive]* good frames have been transmitted to the mobile unit *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, the frame erasures detected and adjusting to higher or maximum value (unclamping) the power transmission of the connection link)*.

Butovitsch does not specifically teach the N consecutive frame erasures, clamping and unclamping.

In a related art dealing with power transmission control of a CDMA system *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67)*, Higuchi teaches N consecutive frame erasures *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*.

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Higuchi's frame erasures calculation into Butovitsch mobile communication system to provide a system with transmission power control with reduced power and reduced interference *(Butovitsch, column 1, lines 5-13, column 5, lines 51-57)*, and with constant communication reception quality regardless of changes in the environment *(Higuchi, column 2, lines 52-58)*.

However, Higuchi does not specifically teach clamping and unclamping.

In related art dealing with power transmission control in a CDMA system *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6)*, Shinde teaches power level clamping and unclamping *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6)*.

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Shinde's power level clamping into Butovitsch in view of Higuchi' mobile communication system with transmission

power to provide a CDMA communication system "capable of reliably preventing an erroneous operation" and "guaranteeing reliability of the system" *(Shinde, paragraph [0016], lines 1-8).*

Regarding claim 33, Butovitsch discloses a power reduction recovery method for a mobile communication system for controlling power transmitted by a base station via a plurality of links to maintain a call with a mobile unit *(see for example, Figures 1-5c, Abstract, lines 1-11, column 1, lines 1-13, column 4, lines 56-58, column 5, lines 51-57, column 6, lines 30-37, column 7, lines 57-63, column 6, lines 52-55, column 8, lines 5-20, lines 55-67 continued to column 9, lines 1-3, mobile communication system with transmission power control by one to the base station for connection of mobile and base station and reducing the transmission power)*, the power reduction recovery method comprising the steps of: detecting by the base station that each of the plurality of links to the mobile unit *[is clamped] (see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, the frame erasures detected and adjusting the transmission power of the connection link)*; when each of the plurality of link is *[clamped,]* increasing the power transmitted on each of the plurality of links *(see for example, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, adjusting the transmission power level)*; and if the call with the mobile unit is maintained, inhibiting an increase of power transmitted on each of the plurality of

links *(see for example, Abstract, lines 1-11, column 6, lines 30-37, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, adjusting the power level and increasing transmission power).*

However, Higuchi does not specifically teach clamping.

In related art dealing with power transmission control in a CDMA system *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6),* Shinde teaches power level clamping *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6).*

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Shinde's power level clamping into Butovitsch in view of Higuchi' mobile communication system with transmission power to provide a CDMA communication system "capable of reliably preventing an erroneous operation" and "guaranteeing reliability of the system" *(Shinde, paragraph [0016], lines 1-8).*

Regarding claim 2, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 1, and further, Butovitsch teaches wherein the step of detecting is performed if a frame erasure is detected *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission).*

Regarding claim 3, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 1, further, Butovitsch teaches wherein if a gain ratio of a data frame is different from a previous data frame *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile is different than previous transmission (gain ratio))*, the steps of detecting, determining *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, determining and detecting),* and further Shinde teach, and clamping are performed *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6).*

Regarding claim 4, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 3, further, Butovitsch teaches wherein if the gain ratio of the data frame is different from the previous data frame the steps of detecting, determining and clamping are inhibited from being performed *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile is different than previous transmission (gain ratio)).*

Regarding claim 5, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 1, further, Butovitsch teaches wherein if a frame erasure is not detected, the steps of detecting, determining *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile is different than previous transmission (gain ratio))* and clamping are inhibited from being performed *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6)*.

Regarding claim 6, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 1, further, Higuchi teaches wherein if a consecutive frame erasure is detected *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*, a consecutive frame erasure counter *(see for example, Abstract, lines 1-11, column 6, lines 30-37, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, adjusting the power level and increasing transmission power)*, and further, Butovitsch teaches there is further included a step of incrementing *(see for example, Abstract, lines 1-11, column 6, lines 30-37, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-*

19, adjusting the power level and increasing transmission power).

Regarding claim 7, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 6, further, Higuchi teaches wherein there is further included a step of determining whether the consecutive frame erasure counter is equal to an allowable consecutive frame erasure (N) *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).*

Regarding claim 34, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 33, further, Shinde teaches wherein the step of detecting includes a step of determining whether each of the plurality of links is clamped by a frame erasure rate associated with each of the plurality of links *(see for example, Figures 1-5, paragraph [0001], lines 1-5, [0002], lines 1-4, [0003], lines 1-6, [0016], lines 1-8, [0061], lines 1-6, [0070], lines 1-6).*

Regarding claim 35, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 34, further, Higuchi teaches determining whether each of the plurality of links is clamped includes a step of detecting M consecutive frame erasures on each of the plurality of links *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4,*

lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).

Regarding claim 36, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 33, further Butovitsch teaches wherein the step of if the call with the mobile unit is maintained, inhibiting an increase of power includes a step of determining from a frame erasure rate that the call has been maintained *(see for example, Abstract, lines 1-11, column 6, lines 30-37, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, adjusting the power level and increasing transmission power).*

Regarding claim 37, Butovitsch in view of Higuchi and in view of Shinde teach all the limitations of claim 36, further Higuchi teaches wherein the step of determining from a frame erasure rate that the call has been maintained includes a step of detecting that N consecutive non-frame erasures are received by at least one link of the plurality of links *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).*

2. Claims 16-25, and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butovitsch (Butovitsch et al., US Patent No. 6,259,927) in view

of Higuchi (Higuchi et al., US Patent No. 6,967,987).

Regarding claim 16, Butovitsch discloses in a mobile communication system *(see for example, Figures 1-5c, column 1, lines 1-13)*, a power reduction method for controlling power transmitted by a base station of a plurality of base stations to a mobile unit *(see for example, Figures 1-5c, Abstract, lines 1-11, column 1, lines 1-13, column 4, lines 56-58, column 5, lines 51-57, column 6, lines 30-37, column 7, lines 57-63, column 6, lines 52-55, column 8, lines 5-20, lines 55-67 continued to column 9, lines 1-3, mobile communication system with transmission power control by one to the base station for connection of mobile and base station and reducing the transmission power)*, the power reduction method comprising the steps of: counting by the base station a number of *[consecutive]* frame erasures *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, the base station calculating the frame erasures (FER) of downlink transmission)*; determining whether the number of *[consecutive]* frame erasures is equal to an allowable *[consecutive]* frame erasures (N) *(see for example, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, determining the station is in soft-handoff condition with mobile station)*; and if the number of consecutive frame erasures is equal to N, entering by the base station a recovery state *(see for example, column 7, lines 57-63, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, the frame erasures detected)*.

Butovitsch does not specifically teach the N consecutive frame erasures.

In a related art dealing with power transmission control of a CDMA system *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67)*, Higuchi teaches N consecutive frame erasures *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*.

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Higuchi's frame erasures calculation into Butovitsch mobile communication system to provide a system with transmission power control with reduced power and reduced interference *(Butovitsch, column 1, lines 5-13, column 5, lines 51-57)*, and with constant communication reception quality regardless of changes in the environment *(Higuchi, column 2, lines 52-58)*.

Regarding claim 27, Butovitsch discloses a power reduction method for a mobile communication system for controlling power transmitted by a base station via a link to a mobile unit *(see for example, Figures 1-5c, Abstract, lines 1-11, column 1, lines 1-13, column 4, lines 56-58, column 5, lines 51-57, column 6, lines 30-37, column 7, lines 57-63, column 6, lines 52-55, column 8, lines 5-20, lines 55-67 continued to column 9, lines 1-3, mobile communication system with transmission power control for connection of mobile and base station and*

reducing the transmission power), the power reduction method comprising the steps of: detecting by the base station *[a weak]* link to the mobile unit *(see for example, column 8, lines 55-67 continued to column 9, lines 1-12, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the quality of the link)*; and when the *[weak]* link is detected, setting by the base station a transmit power level to a reduced transmit power level *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-12, reducing the transmitted power level to the lower quality link)*.

Butovitsch does not specifically teach the weak link, however, Butovitsch teaches the quality of the communication link between the base station and the mobile station *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-12, reducing the transmitted power level to the lower quality link)*.

In a related art dealing with power transmission control of a CDMA system *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67)*, Higuchi teaches weak link between the base station and mobile station *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67)*.

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Higuchi's communication link calculation into Butovitsch mobile communication system to provide a system with

transmission power control with reduced power and reduced interference *(Butovitsch, column 1, lines 5-13, column 5, lines 51-57)*, and with constant communication reception quality regardless of changes in the environment *(Higuchi, column 2, lines 52-58)*.

Regarding claim 17, Butovitsch in view of Higuchi teach all the limitations of claim 16, further, Butovitsch teaches wherein if a data frame is a first data frame in the recovery state, there is further included a step of setting a gain ratio to a nominal value *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile (gain ratio))*.

Regarding claim 18, Butovitsch in view of Higuchi teach all the limitations of claim 17, further, Butovitsch teaches wherein if the data frame is not the first data frame in the recovery state there is further included a step of determining whether the gain ratio is less than a maximum value *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile (gain ratio) lower than highest value)*.

Regarding claim 19, Butovitsch in view of Higuchi teach all the limitations of

claim 18, further, Butovitsch teaches wherein if the gain ratio is not less than maximum value there is further included a step of setting the gain ratio to one step less than the maximum value *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile (gain ratio) not lower than highest value).*

Regarding claim 20, Butovitsch in view of Higuchi teach all the limitations of claim 19, further, Butovitsch teaches wherein if the gain ratio is less than the maximum value there is further included steps of: increasing the gain ratio by one step size; and maintaining the gain ratio at less than the maximum value *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, column 10, lines 8-19, detecting the frame erasures (FER) of downlink transmission and the base station transmit power to mobile (gain ratio)).*

Regarding claim 21, Butovitsch in view of Higuchi teach all the limitations of claim 18, further, Butovitsch teaches wherein there is further included a step of determining whether the data frame is a good data frame *(see for example, column 7, lines 18-63, column 8, lines 55-67 continued to column 9, lines 1-3, lines 13-26, column 10, lines 8-19, the frame erasures detected and evaluated data frame).*

Regarding claim 22, Butovitsch in view of Higuchi teach all the limitations of claim 21, further, Butovitsch teaches wherein if the data frame is a good data frame, there is further included a step of incrementing a count of consecutive good frames *(see for example, Abstract, lines 1-11, column 6, lines 30-37, column 7, lines 50-63, column 8, lines 61-67 continued to column 9, lines 1-3, 13-26, column 10, lines 8-19, adjusting the power level and increasing transmission power)*.

Regarding claim 23, Butovitsch in view of Higuchi teach all the limitations of claim 22, further, Higuchi teaches wherein if the data frame is not a good data frame there is further included a step of resetting the count of the consecutive good frames *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*.

Regarding claim 24, Butovitsch in view of Higuchi teach all the limitations of claim 23, further, Higuchi teaches wherein there is further included a step of determining whether the count of the consecutive good frames is equal to a required number of consecutive good frames (M) *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67,*

the number of frame erasures (N_FERs) on a link).

Regarding claim 25, Butovitsch in view of Higuchi teach all the limitations of claim 24, further, Higuchi teaches wherein if the count of the consecutive good frames is equal to M, there is further included the steps of: setting the recovery state of the base station to a normal state; and resetting the number of consecutive frame erasures *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).*

Regarding claim 28, Butovitsch in view of Higuchi teach all the limitations of claim 27, further, Butovitsch teaches step of maintaining the reduced transmit power level until the link is no longer the weak link *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-12, reducing the transmitted power level to the lower quality link).*

Regarding claim 29, Butovitsch in view of Higuchi teach all the limitations of claim 28, further, Butovitsch teaches step of determining that the link is no longer the weak link by a frame erasure rate associated with the weak link *(see for example, column 7, lines 57-63, column 8, lines 61-67 continued to column 9, lines 1-12, reducing the transmitted power level to the lower quality link).*

Regarding claim 30, Butovitsch in view of Higuchi teach all the limitations of claim 29, further, Butovitsch teaches Higuchi wherein the step of determining includes a step of detecting M consecutive good frame on the weak link *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*.

Regarding claim 31, Butovitsch in view of Higuchi teach all the limitations of claim 27, further, Higuchi teaches step of detecting includes a step of determining that the link is the weak link by a frame erasure rate associated with the link *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines 26-38, lines 60-67, the number of frame erasures (N_FERs) on a link)*.

Regarding claim 32, Butovitsch in view of Higuchi teach all the limitations of claim 31, further, Higuchi teaches step of determining that the link is the weak link includes a step of detecting N consecutive frame erasures on the link *(see for example, Figure 5, column 1, lines 14-19, column 2, lines 52-67, column 3, lines 22-35, column 4, lines 37-67 continued to column 5, lines 1-10, column 6, lines*

26-38, lines 60-67, the number of frame erasures (N_FERs) on a link).

Allowable Subject Matter

3. Claims 8-15 are objected.

Claims 8-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art specifically Butovitsch, Higuchi, and Shinde failed to render obviousness in combination or individually and failed to anticipate individually the following underlined limitations:

"wherein if a consecutive frame erasure is detected, there is further included a step of incrementing a consecutive frame erasure counter" "wherein there is further included a step of determining whether the consecutive frame erasure counter is equal to an allowable consecutive frame erasure (N)" "wherein if the number of consecutive good frames does equal M there is further included the steps of: resetting the consecutive frame erasures counter; setting the gain ratio to an unclamped gain ratio; and responding by the base station to power control bits from the mobile unit" "wherein if the consecutive frame erasure counter

equals the allowable consecutive frame erasure (N), then there is further included steps of: resetting a consecutive good frames counter; setting a gain ratio to a clamped gain ratio; and ignoring by the base station power control bits transmitted by the mobile unit" as disclosed in claim 8.

For these reasons, dependent claim 8 is allowable. Claims 9-15 are depend on the dependent claim 8 are allowable under the same reasons set forth in claim 8.

Conclusion

The prior art made of record considered pertinent to applicant's disclosure, see PTO-892 form.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.
2/21/06

Shaima Q. Aminzay
(Examiner)
February 21, 2006

Nay A. Maung
(SPE)